

699 Pre-Operative Screening and Investigation of Patients with Suspected Non-Alcoholic Fatty Liver Disease Among Bariatric Surgery Patients

A. Antypas¹, A. Austin², S. Awad², D. Hughes^{2,3}, I. Idris^{1,2}

¹School of Medicine, University of Nottingham, Nottingham, United Kingdom,

²University Hospitals of Derby and Burton Foundation Trust, Derby, United Kingdom,

³Division of Medical Sciences & Graduate Entry Medicine, School of Medicine, University of Nottingham, Royal Derby Hospital Centre, Derby, United Kingdom

Introduction: Non-alcoholic fatty liver disease (NAFLD) is becoming more prevalent. The investigations used to diagnose NAFLD include FIB-4 score, NAFLD score and AST/ALT ratio (AAR). Gold-standard for diagnosis is liver biopsy. Bariatric surgery reduces steatosis and fibrosis in NAFLD patients. However, in undiagnosed NAFLD, it can lead to worsening fibrosis and decompensation of cirrhosis, causing complications.

The aim is to identify how well bariatric patients are being screened for NAFLD pre-operatively.

Method: Database analysis was conducted in the bariatric clinics at Royal Derby Hospital and analysed using SPSS.

Results: 392 patients' data (Overall group) were analysed and compared with those who had an AAR>1 (Abnormal group). Abnormal group had a higher mean AAR, NAFLD and FIB-4 scores. Surprisingly, ALT and AST levels were higher in Overall group compared to Abnormal. Generally, patients were not pre-operatively checked sufficiently (81.9% LFTs, 62.2% ASTs).

Conclusions: A large number of patients could have undiagnosed NAFLD due to the lack of LFT/AST checks as ALT scores alone would miss fibrosis. Using AAR>1 and FIB-4 would allow clinicians to detect fibrosis earlier to carry out non-invasive diagnostic measures, avoiding unnecessary biopsies. Early diagnosis means patients undergoing bariatric surgery with possible cirrhosis will not experience decompensation and associated complications.